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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,763	03/11/2004	Xiaoyu Li	DP-310460	6443
22851 7590 04/03/2007 DELPHI TECHNOLOGIES, INC. M/C 480-410-202 PO BOX 5052 TROY, MI 48007			EXAMINER BOES, TERENCE	
			ART UNIT	PAPER NUMBER
			3682	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/03/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/798,763	LI ET AL.	
	Examiner	Art Unit	
	Terence Boes	3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 January 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 23 and 24 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 19-21 and 25 is/are rejected.
- 7) ☒ Claim(s) 9, 11-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 20 and 22 objected to because of the following informalities:
  - In claim 20, "10" appears to be a typographical error of --19--
  - In claim 22, "the pivoting" appears to be a typographical error of --a pivoting--

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 10, are rejected under 35 U.S.C. 102(b) as being anticipated by Budzik, Jr. et al. US 5,363,716.

Budzik, Jr. et al disclose:

- a lower steering column jacket (68) for attachment to the vehicle;
- an upper steering column jacket (58) engaged telescopically with said lower steering column jacket for telescoping movement for supporting a steering wheel in a desired longitudinal position relative to said lower steering column jacket (see figures 4 and 5);

- a tilt housing (32) engaged pivotally with said upper steering column jacket for tilting movement for supporting the steering wheel in a desired angular position relative to said upper steering column jacket (see figures 2 and 3)
- a single drive mechanism (see figure 6) for controlling said telescoping movement and said tilting movement.
- wherein said single drive mechanism includes a first mode of operation for moving said tilt housing in said tilting movement relative to said upper steering column jacket and a second mode of operation for moving said upper steering column jacket in said telescoping movement relative to said lower steering column jacket (see abstract).
- wherein said single drive mechanism includes a single locking device (176, 188, 190, 156, 170) for locking said single drive mechanism in one of said first mode of operation and said second mode of operation.
- wherein said single drive mechanism includes a member (102) pivotally connected to said tilt housing to direct said tilt housing in said tilting movement (see figures 2 and 3)
- wherein said locking device selectively engages said member (102) to lock said single drive mechanism in said second mode of operation (see figure 7, C6/L59-C7/L26).
- wherein said locking device is further defined as being substantially supported by and fixed to said upper steering column jacket (see figure 1).

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3. Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by Hiragushi JP 02133280A.

Hiragushi discloses:

- a lower steering column jacket (1) for attachment to a vehicle;
- an upper steering column jacket (11) engaged with said lower steering column jacket for telescoping movement for supporting a steering wheel in a desired longitudinal position relative to said lower steering column jacket;
- a tilt housing (21) engaged with said upper steering column jacket for tilting movement for supporting the steering wheel in a desired angular position relative to said upper steering column jacket;
- a single drive mechanism (23) for controlling said telescoping movement and said tilting movement including a locking device (5 or 20) for locking said single drive mechanism to direct one of said telescoping movement and tilting movement at a time (see abstract).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7, 8, 10, 19, and 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Budzik, Jr. et al. US 5,363,716 in view of Hiragushi JP 402133280.

Budzik, Jr. et al. disclose all of the claimed subject matter as described above.

Budzik, Jr. et al. also disclose:

- wherein said locking device includes a single locking arm (176) engaged for pivoting movement with said upper steering column jacket between a tilting-locked position and a telescoping-locked position (see figures 7 and 8).
- a pivoting device (178) operably associated with said locking device to direct said pivoting movement of said locking arm between said tilting-locked and telescoping-locked positions.
- wherein said pivoting device includes a lever arm (178) pivotally associated with said upper steering column jacket adjacent to said tilt housing (see figure 1).

Budzik, Jr. et al. do not disclose a motor fixed to a lower steering column jacket including a rotatable shaft.

Hiragushi teaches a motor (23) fixed to a lower steering column jacket (1) including a rotatable shaft for the purpose of selectively and automatically tilting or telescoping a steering column by using a single motor (see abstract).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Budzik, Jr. et al. and provide a motor fixed to a lower steering column jacket including a rotatable shaft, as taught by Hiragushi, for the purpose of selectively and automatically tilting or telescoping a steering column.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Budzik, Jr. et al. US 5,363,716 in view of Hiragushi JP 402133280 as applied to claim 20 above, and further in view of Arihara US 2003/0222448.

Budzik, Jr. et al. in view of Hiragushi discloses all of the claimed subject matter as described above. Budzik, Jr. et al. in view of Hiragushi does not explicitly disclose a switch communicating with said motor for selectively engaging said motor to rotate said shaft and being rotatably positioned at an end of a lever arm.

Arihara teaches a switch (SW, Paragraph [00042], the bar is considered to be the lever arm) communicating with said motor for selectively engaging said motor to rotate said shaft and being rotatably positioned at an end of a lever arm for the purpose of selectively energizing a motor in a chosen direction (Paragraph [00042], SW)

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Budzik, Jr. et al. in view of Hiragushi and provide a switch communicating with said motor for selectively engaging said motor to

rotate said shaft and being rotatably positioned at an end of a lever arm, as taught by Arihara, for the purpose of selectively energizing a motor in a chosen direction.

***Allowable Subject Matter***

6. Claim 22 is allowed.
7. Claims 9, 11-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

8. Applicant's arguments with respect to claims 1-10, 19-21 have been considered but are moot in view of the new ground(s) of rejection.
9. Applicant's arguments filed 01/02/2007, with respect to claim 25 have been fully considered but they are not persuasive.

Applicant argues "Moreover, the tilt housing (16) of claim 1 supports the steering wheel. In the Hiragushi'280 reference, the alleged upper jacket (11) supports the steering wheel."

In response, both the upper jacket 11 and the tilt housing (21) "support" the steering wheel, as can be seen in figure 1. The tilt housing (21) pivotally supports the steering wheel.

Applicant argues "Moreover, element (7) of Hiragushi '280A can not be the upper steering column jacket because it is not engaged telescopically with



elements (2) and/or (1). If element (11) is the upper steering column jacket it is not engaged pivotally to the tilt housing (2)."

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., upper steering column engaged telescopically) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., tilt housing engaged pivotally) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Furthermore, the upper steering column jacket (11) clearly undergoes telescopic motion relative to lower steering column jacket (see figure 1 and abstract), and the tilt housing is engaged with said upper steering column jacket (as claimed).

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terence Boes whose telephone number is (571) 272-4898. The examiner can normally be reached on Monday - Friday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TB

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3/27/07



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